

an acute-related mental health intervention in the ED. Gender differences were observed in the age distribution across age groups. The MEDEA index showed that a high proportion of episodes resided in most socio-economically deprived areas (quintiles 4-5). Overall, anxiety-related disorders comprised up to 50% of ED episodes. An overrepresentation of female gender was observed within the anxiety and stress-related disorders, mood disorders and personality disorders. By contrast, men accounted for 70% of the mental and behavioural disorders due to psychoactive substance use. Considering main clinical syndromic clusters, analysis showed that female patients were more likely to be prescribed with anxiolytic treatment in ED treatment than men in the categories of "Common mental disorders" (PR=1.122 [1.014-1.242; p=0.025], "Severe Mental Disorders" (PR=1.217[1.054-1.406]; p=0.007) and "Personality disorders" (PR=1.398 [1.038-1.884]; p=0.028).

This study highlights the significance of taking sex and gender determinants into account in both clinical presentation and management of acute psychiatric emergencies. Similarly, stresses the relevance of implementing a gender-sensitive approach to addressing sex and gender issues in biomedical research.

No conflict of interest

doi: <https://doi.org/10.1016/j.nsa.2022.100741>

P.0711

NEUROSCIENCE APPLIED 1 (2022) 100112 100742

Systemic chronic treatment with cannabidiol in carioca high and low conditioned freezing rats in the neuropathic pain model

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Background: Epidemiological studies have showed high comorbidity of anxiety disorder and chronic pain, among this pathologies are generalized anxiety disorder (GAD) and neuropathic pain. Experimental studies associate the high level of anxiety with elevated pain sensitivity in these conditions, and possible treatments are still under investigation. In recent decades, cannabidiol (CBD) has been considered a promising treatment for several diseases, including these pathologies. Studies suggest that CBD is relevant role in the modulation of emotional system involved in different psychiatric disorders. Animal models of anxiety offer important insights into the understanding of the interaction between these diseases. In this study, we investigated whether chronic systemic treatment with CBD reduces pain sensitivity in high- (CHF) and low-freezing (CLF) Carioca rats (GAD model) and control rats (CTL) submitted to a chronic neuropathic pain model.

Methods: CLF (n = 22), CTL (n = 30), CHF (n = 30) of the same age (CEUA 2019.1.833.59.2) were evaluated in the sensory-discriminative aspects (von Frey test, acetone test, and hot plate test) before the chronic constriction injury of ischiatic nerve (CCI) and control group (SHAM) and on days 13 and 23 after surgery. Nociceptive behaviors such as paw withdrawal, shaking, and licking were types of standardized measures observed in these physiological assessments. Chronic treatment with CBD (5mg/kg, daily) was used for 10 days from the onset of chronic neuropathic pain (14th day after CCI). Locomotion was evaluated with the open field test (OFT) on the 22nd day. Affective-motivational aspects (escape/avoidance test) were assessed on day 24 after surgery. A two-way repeated ANOVA test was used to evaluate nociceptive tests, followed by the Tukey test (p < 0.05). A two-way ANOVA was used to analyze the OFT and escape/avoidance test, followed by the Tukey test (p < 0.05). All analyses were performed using IBM SPSS 23 software (SPSS Inc., Chicago, IL, USA).

Results: An anti-allodynic effect of CBD was observed in the von Frey test in condition (F(1,72) = 110.2), treatment (F(1,72) = 162.664), time (F(2,72) = 616.514), and interaction (F(2,72) = 5.933) factors (p < 0.05), in the acetone test in lineage (F(2,72) = 3.146), condition (F(1,72) = 665.590), treatment (F(1,72) = 15.229), time (F(2,72) = 0.154) factors (p < 0.05), and in the hot plate test in lineage (F(2,72) = 3.582) condition (F(1,72) = 6.513), treatment (F(1,72) = 19.130) (p < 0.05) factors. The OFT showed differences in interaction of % time spent in center (F(2,70) = 3.730), in the number of crossings in lineage (F(2,70) = 12.367) and interaction (F(2,70) = 4.549) factors. The escape/avoidance test showed significant differences in lineage (F(2,70) = 11.640) and treatment (F(1,70) = 4.548) factors (p < 0.05).

Conclusions: These results suggest that the CBD mechanical anti-allodynic effect

and emotional effects can depend on anxiety level.

Conflict of interest

Financial Support: FAPESP (2019/22120-4) INCT (CNPq n° 465458/2014-9 FAPESP n° 2014/50891-1).

doi: <https://doi.org/10.1016/j.nsa.2022.100742>

P.0712

NEUROSCIENCE APPLIED 1 (2022) 100112 100743

Cannabidiol in anxiety research – a translational integration of preclinical and clinical studies

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Introduction: Preclinical research suggests that cannabidiol (CBD) may have therapeutic potential in pathological anxiety. Guidelines to inform the study design of future human studies are however lacking.

Aims: We aimed to determine the boundary conditions for anxiolytic effects of CBD in humans by integrating, both qualitatively and quantitatively, pharmacokinetic (PK) and pharmacodynamic (PD) (and subsidiary safety) data from preclinical and clinical studies.

Methods: We conducted two systematic reviews in Pubmed and Embase up to August 2021, into PK and PD data of systemic CBD exposure in both humans and animals, which includes anxiolytic and potential side effects. Risk of bias was assessed for effects on anxiety outcomes (SYRCLE's RoB tool [1] and Cochrane RoB 2.0 [2]), PK outcomes, and harm-related outcomes. A control group was an inclusion criterion in outcome studies across species. In human outcome studies, randomisation was required. We excluded studies that co-administered other substances. We used the IB-de-risk tool [3] for a translational integration of PK and PD data. Further, a meta-analysis, stratified by type of anxiety and using three-level random effects models, was conducted to investigate sources of heterogeneity of CBD effects on anxiety outcomes. The Grading of Recommendations, Assessment, Development and Evaluation (GRADE) approach [4] was used to rate the quality of the evidence.

Results: We synthesized data from 87 articles with the IB-derisk tool. Most studies (70.3%) reported null effects of CBD on anxiety outcomes. There was no identifiable relation between anxiety outcomes and drug levels across species. In all species (humans, mice, rats), anxiolytic effects of CBD seemed to be clustered in certain differential concentration ranges, which differed between species. Data from 61 articles were included in the meta-analysis. The overall pooled effects of CBD on anxiety differed significantly from zero, p<.02. The effect was moderate to large for conditioned anxiety in animals, Hedge's G=0.68, 95%CI[0.11, 1.26], moderate for unconditioned anxiety in animals, Hedge's G=0.50, 95%CI[0.29, 0.70], and large for human experimental anxiety, Hedge's G=0.79, 95%CI[0.28, 1.31]. In all cases, compared to placebo/vehicle, CBD exerted beneficial effects on anxiety outcomes. No severe adverse effects were reported. There was substantial heterogeneity between average effect sizes within studies, $\sigma^2w < 0.20$, p<.01.

Conclusions: A straightforward recommendation for optimal dosing was not possible, because there was no consistent linear effect of CBD on anxiety reduction, and concentration-effect relations were variable across species. Acute and (sub)chronic dosing studies with integrated PK and PD outcomes are required for substantiated dose recommendations. The low quality meta-analytic evidence confirmed the often discussed potential of CBD for treating anxiety symptoms. The compound induced anxiolytic effects, regardless of the type of anxiety studied. Moderator analyses will be conducted to determine other sources of heterogeneity of CBD effects, such as type of anxiety test and anxiety outcome.

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Conflict of interest

Disclosure statement:

This work is supported by the research budget of Utrecht University and by a research grant of Espria/ MHC Drenthe (GR 18-130a GR 18-130b).

doi: <https://doi.org/10.1016/j.nsa.2022.100743>

P.0713

NEUROSCIENCE APPLIED 1 (2022) 100112 100744

Augmentation strategy fluoxetine and lurasidone in the treatment of obsessive-compulsive disorder with comorbid restrictive anorexia nervosa – a case report

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Background: Obsessive-Compulsive Disorder (OCD) is characterized by the presence of intrusive thoughts (obsessions) and ritualistic behaviours (compulsions) [1]. First-choice psychopharmacological treatment is based on serotonin reuptake inhibitors (SRIs) and cognitive-behavioural approaches. Nevertheless, even though these strategies are well applied, 40-60% of OCD patients show residual symptoms. New approaches have been recently individuated for treatment-resistant OCD (tr-OCD): the hypothesis of malfunctioning in inhibition of the amygdala by mesolimbic dopaminergic system led to a new strategy of augmentation with second-generation antipsychotic drugs (SGAs) [2]. A significant role is characterized by prolonged-release quetiapine, risperidone and aripiprazole. Lurasidone is a second-generation antipsychotic with good efficacy and lower metabolic and cardiovascular side effects if compared with other SGAs, but there is currently brief experience about its use in treatment of OCD, especially whereas comorbid anorexia nervosa- restrictive type (AN-r) is present. **Objective:** This case report presents the effect of augmentation strategy with lurasidone (37 mg daily bedtime) in a 45-years old woman with a relapse episode of severe OCD with comorbid AN-r, previously treated with combined fluoxetine and olanzapine treatment, subsequently interrupted.

Methods: During the first visit to our psychiatric clinic the patient was provided self- and hetero-administered assessment with Yale-Brown Obsessive Compulsive Scale (Y-BOCS-II), Clinical Global Impression-Severity (CGI-S), Symptom Checklist-90 (SCL-90) and Eating Disorder Inventory-3 (EDI-3). Indeed, the patient was re-evaluated with tests and clinical interviews once a month for the following six months. Pharmacotherapy with fluoxetine was set up at first observation and dosage was gradually adequate from 20 mg/die to 30 mg/die after one month, to get up to regimen with 40 mg per day after two months. Lurasidone was prescribed at first visit, at dosage of 37 mg per day after dinner, keeping dose stable during the six-months follow-up.

Results: Compared to the baseline, a clinically significant clinical response was observed on OC symptomatology at Y-BOCS-II ($\geq 35\%$ Y-BOCS score reduction), while a full remission after 3 months (Y-BOCS scoring ≤ 14) ($p < 0.01$). Furthermore, CGI total score halved after one month and turned to 1 after five-months observation. Clinical response was reported on eating symptomatology at EDI-3 after one month and the scores remained stable over the following five months follow-up. We also noticed, throughout clinical follow-up interviews, improvement in patient's social skills and life satisfaction.

Conclusion: Lurasidone has attracted attention because of its interesting pharmacodynamic functioning (it is a full antagonist at dopamine D2 and serotonin 5-HT2A receptors, and high binding affinity for the 5-HT7 receptor) [3]. Despite it isn't a recognized indication, lurasidone showed to be effective on obsessive symptoms also in previous studies [4]. The management of this clinical case demonstrates a possible indication of lurasidone as augmentation strategy in tr-OCD. Nevertheless, further longitudinal and real-world effectiveness studies are needed to confirm effectiveness in attenuating OC symptomatology, in tr-OCD and whereas a comorbid AN-r is present.

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No conflict of interest

doi: <https://doi.org/10.1016/j.nsa.2022.100744>

P.0715

NEUROSCIENCE APPLIED 1 (2022) 100112 100745

Burnout among healthcare professionals during COVID-19 pandemic in Tunisia – a cross sectional study

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Introduction: The rapid spread of the SARS-CoV-2 pandemic worldwide and especially in Tunisia poses challenges to the management of both physical and mental health. This unexpected situation leads to chronic exposure to stressors. It was mostly faced by healthcare professionals who reported experiencing burnout syndrome and even depression and anxiety disorders. Burnout is commonly described as a three-dimensional syndrome, consisting of emotional exhaustion, depersonalization, and reduced personal accomplishment.

Despite all these consequences, the psychological impact of the COVID-19 pandemic on Tunisian health care professionals remains to be poorly understood.

Objective: Our study aims to:

- Assess the prevalence of burnout syndrome among health care professionals in the University Hospital of Monastir (Tunisia) during the covid-19 pandemic.
- Identify factors associated with burnout syndrome.

Methods: A cross-sectional study was conducted among healthcare professionals from various disciplines in the University Hospital of Monastir (Tunisia) from June to November 2020. The data collected were about age, gender, marital status, medical history, self-reported mental illness, diagnosed mental illness, prior psychiatric treatment, and professional characteristics (occupations, service seniority, department, and work schedule).

Participants with working seniority of less than one month were excluded from the study.

Burnout was assessed using the Maslach Burnout Inventory (MBI) which is a psychological assessment instrument comprising 22 symptom items pertaining to occupational burnout.

The French version of this questionnaire was used in this survey. Each participant completed the questionnaires anonymously and their responses remained confidential.

The questionnaire contained detailed instructions about the research, the main purposes, and a statement indicating that the completion of the questionnaire acknowledges informed consent. Data collection and statistical analysis were performed using the Statistical Package for Social Sciences (SPSS) version 21.0 (SPSS; version 21.0 Chicago.IL.USA).

A comparison of sociodemographic variables between the healthcare workers according to professional status was performed through Kruskal-Wallis and χ^2 tests. Multivariate linear regression analyses were used to identify the variables independently associated with MBI total score.

If otherwise, in all analyses, p-values of less than 0.05 were considered statistically significant.

Results: Three hundred and five healthcare professionals were recruited. The mean age was 29 and ranged from 22 to 62 years old. The sex ratio was 0.66. 53% of participants experienced high levels of burnout. 17.4% of participants experienced a high level of emotional exhaustion and 18.7% of them experienced depersonalization. Multivariable logistic regression analysis revealed that having a personal history of a psychiatric disorder ($p = 0.001$) and being a physician ($p = 0.04$) were associated with a high risk of burnout syndrome. The seniority